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SCENE SET FOR CHANGING VIEWS ON DEFENSE SPENDING

Tokyo BUSINESS JAPAN in English Oct 80 p 129

[Text]

PRIME Minister Zenko Suzuki is, despite his relatively short time in office, rather shrewdly testing the waters in what could well prove to be one of the major issues of his tenure as head of government: at what pace and to what extent should Japan boost its military strength? The question, to a large degree forced on Japan by Washington, could have an important impact on Japan's domestic economy.

In the wake of the Soviet invasion of Afghanistan in December 1979, the Americans have strengthened demands that Japan should shoulder more of the burden for its own defense. But a growing number of thoughtful Japanese are also convinced of the need for a review of the nation's military options. The continued viability of post-war pacificism is being questioned with increasing frankness in the light of the recent upheavals in areas of vital importance to Japanese economic interests such as the Middle East, South Korea and Indochina.

To be sure, the suggestion that Japan should build its Self-Defense Forces (SDF) into a command capable of holding off a non-nuclear strike against the home islands or keeping vital sea-lanes clear still raises strong reactions in some quarters in Japan, especially among left-leaning opposition parties.

But the new willingness to debate the issue openly signals a growing level of public acceptance of this once taboo subject. Japan's conservative leaders seem determined, if for the most part cautiously so, to mold this new tolerance into a popular consensus favoring more assertive defense policies.

There has been further evidence that the defense debate has moved decisively off center. Defense Agency director Joji Omura and Finance Minister Michio Watanabe agreed recently to increase defense spending in fiscal 1981 (beginning April 1981) by 9.7% over this fiscal year's budget, to an amount equivalent to 0.91% of Japan's gross national product (GNP) for the period (the figure should hit 0.9% during the current fiscal period).

By American and European standards, the amount is still modest. It is also well below the 1% of the GNP, the psychological ceiling which the Japanese have imposed on themselves as the upper limit of "safe" defense spending (though, according to NATO's formula for calculation, that Japanese already spend considerably more). The proposed appropriation looks even smaller when discounted for inflation (currently running at an annual rate of about 8%). For the Japanese, however, the spending rise has considerable meaning.

Clearly, the Omura-Watanabe compromise was, under the circumstances, a deft stroke of political gamesmanship. The defense chief wanted a 15% rise in expenditures to help assuage American critics and meet Washington's demands that Tokyo push forward the completion of its current five-year defense build-up program by one year to 1983. (Defense experts in Tokyo estimate that it would actually take an average increase of 15.4% between now and 1983 to comply).

Watanabe, charged with cutting government spending to help lower the Treasury's bulging deficits, was forced

to draw the line short of Omura's request, but not so short that Tokyo might appear to be backing out on pledges made by the late Prime Minister Masayoshi Ohira during his summit talks in May with U.S. President Jimmy Carter. Ohira assured Carter that Japan would shoulder gradual but significant increases in defense.

To show that even the traditionally tight-fisted Treasury is taking the matter seriously, Watanabe agreed to exclude defense from the 7.9% guideline on budgetary increases to which he plans to hold practically all other government departments. At 9.7% (compared to this fiscal year's increase of 6.5%), the rise in defense appropriations is likely to be augmented by a separately budgeted amount for civil servants' pay increases (which includes military personnel), pushing the actual figure into the double-digit range.

Under the inter-ministerial trade-off, the cabinet officers also agreed to consider further rises in defense-related appropriations should such moves be warranted by changes in the international scene between now and

the time the budget draft is completed at the end of the year.

For Japanese domestic consumption, the value of the deal (no doubt encouraged, if not directly inspired, by Suzuki) is that the ruling party can make itself appear to be making the best of an uncomfortable dilemma: squeezed on the one side by demands to ease the nation's red-ink finances and, on the other, by U.S. badgering to strengthen defenses.

Aside from budgetary constraints, however, public opinion in Japan remains the chief stumbling-block in the way of more decisive action. The public is, for the most part, undecided on the issue — and probably tends to be slightly negative after more than three decades of domestic politics tinged with strong anti-war sentiment. But, the fact that today's Japanese (many of whom have no direct experience of war) hold no very definite opinions on the matter, as opposed to the strong positions of even the recent past, has in itself opened the way for change. □

MILITARY

SECOND DEFENSE TECHNOLOGY, EQUIPMENT CONFERENCE SET

Tokyo JPE AVIATION REPORT-WEEKLY in English 15 Oct 80 p 4

[Text]

The Japanese Defense Agency (JDA) and the US Defense Department will hold their second defense technology and equipment conference in Tokyo Dec. 2-3.

The conference was established to cover bilateral cooperation in defense technology and equipment, when William J. Perry, US Undersecretary of Defense for Research and Engineering, held talks with Akira Watari, Vice Minister for Defense, JDA, in Tokyo in May.

The first meeting took place in Washington Sept. 3-4 between Vitalij Garber, Deputy Undersecretary for International Programs at Perry's office, and Yutaka Wada, Director-General of the JDA's Equipment Bureau.

At the Washington meeting, the Japanese side asked for permission to use US facilities for testing new weapons systems and aircraft. The American side is believed to have consented.

This has paved the way for Japan's use of US facilities for testing a new intermediate trainer to be developed. The sophisticated trainer, coded MT-X, will undergo tests which Japanese facilities cannot cover.

At the coming meeting or the third, the Japanese will submit a specific request to use American facilities for high-altitude performance tests for an MT-X engine now under development. Tests for an MT-X airframe will be discussed in parallel to progress in the MT-X engine project.

The Japanese at the first meeting also requested an increased local production ratio for F-15 fighter engines and local production of Sidewinder AIM-9L air-to-air missiles, and briefed the Americans on the ASM-1 air-to-surface missile which JDA developed.

MILITARY

JDA TO ADOPT FOUR NEW WEAPONS SYSTEMS

Tokyo JPE AVIATION REPORT-WEEKLY in English 15 Oct 80 pp 4-5

[Text]

The Japanese Defense Agency (JDA) at a meeting of the equipment evaluation committee's coordination subcommittee in late September, decided to adopt four new locally developed weapons systems--the short-range surface-to-air missile (SAM), the ASM-1 air-to-surface missile, a new pontoon for river-crossing operations, and an electronic countermeasure (ECM) system for antisubmarine patrol aircraft.

The short-range SAM has been developed by the Ground Self-Defense Force (GSDF) and the Technical R&D Institute (TR&DI) in cooperation with Toshiba Corp. The missile is designed to cover an operational gap between the Hawk missile system and the L-90 35mm antiair machine guns in antiaircraft defense. Demonstration tests were held in FY 1978 and 1979 with high-speed target drones. The GSDF has requested ¥17,168 million for FY 1981 to purchase 24 short-range SAMs for its AAA school, while the ASDF has asked for ¥8,584.3 million to procure 12 units for base defense.

The ASM-1 is a short-range guided missile for airborne attacks on ships. It has been developed by an ASM engineering team, led by Mitsubishi Heavy Industries. Some units for operational evaluation were procured in FY 1978 and 1979. About ¥3,500 million is incorporated into the FY 1980 budget to procure 25 units for practical deployment. They are being mounted on F-1 support fighters.

The new pontoon will replace GSDF's existing steel pontoon systems to step up mobility of Model 74 tanks. It was experimentally fabricated from FY 1974 to 1977 at cost of about ¥500 million. Demonstration tests finished in FY 1979. New pontoons for initial procurement in FY 1981 will be used for training. In future, they will be issued to GSDF construction battalions.

The ECM system for P-2J antisubmarine patrol aircraft was developed by Mitsubishi Electric Corp. from FY 1977 through 1978 at cost of approximately ¥420 million. Functional tests were conducted in FY 1979. Procurement is expected to start in FY 1981.

CSO: 4120

MILITARY

SAM MISSILE PROCUREMENT IN FY'81 FOR AIR BASE DEFENSE

Tokyo JPE AVIATION REPORT-WEEKLY in English 15 Oct 80 pp 5-6

[Text]

The ASDF has requested about ¥9,000 million for FY 1981 starting next April to procure short-range and portable Stinger surface-to-air missiles (SAM) in effort to build up its air base defense capability. The short-range SAM was locally developed.

This is to follow purchase of four advanced 20mm antiair machine guns from the United States under the foreign military sales arrangement in FY 1979. These guns are designed for defense of radar sites.

To upgrade air defense capability of ASDF bases and radar sites, the ASDF plans to take such measures as deployment of antiair weapons systems, promotion of base guard systems, construction of aircraft shelters and development of materials for rapid runway refurbishing, all of which will consume time and money.

The procurement of SAMs and 20mm machine guns represents a specific action for promotion of base defense.

The ASDF is likely not to take any specific action regarding 20mm gun deployment in FY 1981 because evaluation tests and other processes are necessary.

It had requested procurement of 20mm machine guns for FY 1980. But this request was dropped because it has not evaluated the advanced antiair guns.

Besides the advanced antiair guns, the ASDF is considering using 20mm Vulcan guns of F-104J fighters for base defense simultaneously with the fighters' phase-out. It has already studied performance requirements and cost efficiency of modifying the Vulcans for ground use. However, practical tests would be necessary before deciding whether to use the 20mm guns for base defense.

MILITARY

MODEL 74 TANKS FOR NEW SELF-PROPELLED ANTI-AIR GUNS

Tokyo JPE AVIATION REPORT-WEEKLY in English 15 Oct 80 pp 6-7

[Text]

The Ground Self-Defense Force (GSDF) is expected to use Model 74 tank chassis for the new AW-X self-propelled anti-air guns now under development, although the current AW-X scheme envisages a 35mm anti-air gun system mounted on the chassis of Model 61 tanks.

After the first phase of the AW-X project is finished in the current fiscal year ending next March, an anti-air gun system put on the Model 74 tank chassis will become subject to development in FY 1982 for completion in FY 1986. The GSDF is expected to procure about 120 of the new guns. A specific procurement plan will be incorporated into the next medium-term defense program.

The GSDF is giving priority to modernization of anti-air weapons systems. The AW-X project forms part of a modernization project with procurement of short-range and portable surface-to-air missiles starting in FY 1981.

In the first phase, the Technical R&D Institute is to fabricate the turret and the vehicle body in the current fiscal year. Japan Steel Works will fabricate the turret, while Mitsubishi Heavy Industries will manufacture the vehicle chassis from a Model 61 tank.

The Model 61 tank chassis had been picked for the AW-X because of the tank's planned phase-out. However, an AW-X using the Model 61 tank chassis may be unable to operate jointly with Model 74 or new tanks.

Since mobility is an important requirement for the AW-X designed for joint operation with tanks, the GSDF has leaned toward utilizing the Model 74 tank chassis.

MILITARY

GSDF TO SELECT NEW HOWITZER BY YEAR END

Tokyo JPE AVIATION REPORT-WEEKLY in English 15 Oct 80 p 7

[Text]

The Ground Self-Defense Force (GSDF) is believed likely to select a new 155mm howitzer for purchase in FY 1982 by the end of 1980. Candidates include the M-198 of the United States, the FH-70 of Britain, West Germany and Italy, and the FH-77 of Sweden.

The GSDF has proceeded with negotiations with these countries since it dispatched a survey mission abroad in FY 1978.

New howitzers are planned to replace the current Model 75 155mm self-propelled howitzer and towed howitzers.

For the self-propelled type, the GSDF will purchase 155mm barrels and 155mm ammunition for the new howitzers in FY 1982 and start modification of the Model 75 bodies in FY 1984. New self-propelled howitzers will actually be deployed several years after FY 1985. However, deployment of the new towed howitzers will begin in FY 1984.

CSO: 4120

MILITARY

FRAM PROGRAM: TWO SHIPS TO BE MODERNIZED IN FY '81

Tokyo JPE AVIATION REPORT-WEEKLY in English 15 Oct 80 pp 7-8

[Text]

The Maritime Self-Defense Force (MSDF) plans to install antiair and antiship missile systems aboard two older destroyers in FY 1981 under its Fleet Rehabilitation and Modernization (FRAM) program. During the period of the present Medium-term Defense Program (FY 1980 - 84), the MSDF plans to modernize six older destroyers by installing new missile systems.

At present, the MSDF has 48 destroyers and frigates operating in four escort flotillas. Most of them are equipped with Bofor and antisub rockets for antisubmarine operations as well as 5-inch guns for main armament. Only four missile-carrying ships are in service with the MSDF at present.

The MSDF and the Defense Agency have now decided to arm all new destroyers with modern guided weapons and to update older ships with such missile systems as the Sea Sparrow and the Harpoon. Electronic countermeasure equipment will also be installed.

Two 3,100-ton Takatsuki class destroyers and four 4,700-ton Hiei class helicopter-carrying destroyers will be upgraded under the FRAM program. Modernization of each ship will cost approximately ¥10,000 million, but this will enable the MSDF to extend the ship's service life for about eight years, sources say.

All warships to be commissioned in and after FY 1981 will be armed with antiair and antiship missiles, and more than half of the Japanese destroyers will be equipped with various types of missiles including the Tartar in or after FY 1985, according to MSDF sources.

CSO: 4120

MILITARY

ASDF TO PROMOTE ASIP FOR F-4EJ AIRCRAFT

Tokyo JPE AVIATION REPORT-WEEKLY in English 22 Oct 80 p 5

[Text]

The JDA has reportedly requested approximately ¥2,800 million in the FY 1981 defense budget draft for modernization of the ASDF/McDonnell Douglas F-4EJ fighter interceptor aircraft.

The ASDF has been authorized by the National Defense Council, the top defense policy maker of the Japanese Government, to maintain 100 F-15 aircraft by the end of the present Medium-term Defense Program (FY '80 - '84).

Including the F-15 force, the ASDF will be permitted to maintain ten interceptor squadrons. Due to phasing out of the F-4EJ which was originally expected to begin in FY '84 - '85, however, the JDA and ASDF have been studying methods to effectively maintain the 10-squadron interceptor setup. An additional purchase of the F-15 was once considered ideal but this will not be approved for the current MTDP. In the circumstances, the JDA and ASDF believe that improvement of the present F-4EJ is the second best choice.

The ASDF is expected to introduce the F-4 Aircraft Structural Integration Program (ASIP) being used by the USAF for controlling fatigue on its Phantom aircraft. Pending approval, the ASDF will begin procurement of precision measuring equipment to determine strength and fatigue of major parts and components of the airframe and the engine and development of programs to process data which will be acquired through the equipment.

In addition to ASIP, the ASDF plans to upgrade the F-4s by installing new fire control systems, new radar with "look down" capabilities and equipment to fire advanced air-to-air and air-to-ship missiles, sources say.

The JDA and ASDF hope the F-4EJ improvement program will be approved by the Ministry of Finance without major modifications because of its excellent cost effectiveness.

MILITARY

BRIEFS

P-3C'S AT ATSUGI--The Japanese Defense Agency officially informed the Kanagawa Prefectural Government and city authorities of Yamato and Ayase through the Defense Facilities Administration Agency (DFAA) last week that the Maritime Self-Defense Force (MSDF) will station eight Lockheed P-3C antisubmarine patrol aircraft at Atsugi MSDF Air Base in FY 1981-82. The DFAA will begin construction of facilities necessary for deployment of the aircraft at Atsugi soon. Under the current P-3C program, the MSDF will introduce 45 aircraft and station them at such bases as Hachinoe in Aomori Prefecture and Kanoya in Kagoshima Prefecture in addition to Atsugi. Atsugi will become the main base of the MSDF P-3C force and will be equipped with central data processing facilities, which will process all data and information supplied by its P-3Cs. [Text] [Tokyo JPE AVIATION REPORT-WEEKLY in English 22 Oct 80 pp 5-6]

SHORT-RANGE TORPEDO--The MSDF/TR&DI have earmarked about 600 million yen in a budget request for FY 1981 to continue research and fabrication of the GRX-3 antisubmarine short-range torpedo during the year. In the FY 1980 budget, about 260 million yen is planned for research and fabrication of GRX-3 components and about 220 million yen for fabrication of homing torpedoes. The GRX-3 program will be carried out in parallel with modification of Model 73 short-range torpedoes. Modified Model 73 torpedoes will be mounted on P-3C antisubmarine patrol aircraft. The first three aircraft will be acquired by the MSDF in FY 1981 under a foreign military sales (FMS) contract with the United States. Development of the GRX-2 long-range torpedo will also continue in FY 1981. [Text] [Tokyo JPE AVIATION REPORT-WEEKLY in English 15 Oct 80 p 9]

CSO: 4120

ECONOMIC

BANK OF JAPAN, PLANNING AGENCY ANALYZE ECONOMY

OW141121 Tokyo KYODO in English 1055 GMT 14 Oct 80

[Text] Tokyo, Oct 14, KYODO--The Japanese economy has moved into the phase of expansion, although the tempo of recovery is still extremely slow, the Bank of Japan said Tuesday.

In its monthly report on domestic economic and monetary conditions, the central bank said some economic indicators are still unfavorable.

The bank said, for instance, personal consumption spending is remaining sluggish and inventory liquidation is slow in some industries.

But plant and equipment investments are holding strong along with exports, it noted. In addition, profit-earning performance of corporate firms is favorable.

Judging from these factors, present conditions of the domestic economy cannot be described as bad, bank officials said. The economy appears to be already in the phase of slow expansion, they added.

Meanwhile, the Economic Planning Agency (EPA) said signs of economic slowdown are evident throughout the country. The EPA said it had found this out at meetings it held in 11 major cities across the nation to survey conditions of regional economies.

At the regional meetings, held in September, strong concern was expressed by participating businessmen over present domestic economic conditions, the EPA said.

Signs of economic slowdown were especially noticeable in areas heavily dependent on public works projects and affected badly by the cool summer, it said.

The participants of the meetings thus expressed the hope that the government will enforce strong business-stimulating steps, including another cut in the Bank of Japan's official discount rate and promotion of fiscal spending on public works projects, according to the EPA.

They also said the government should do its best to stabilize consumer prices as soon as possible to stimulate consumer spending, it added.

CSO: 4120

ECONOMIC

INDUSTRY HEADS TO MEET BOEING OFFICIALS

Tokyo JPE AVIATION REPORT-WEEKLY in English 15 Oct 80 pp 1-2

[Text]

Executive directors of three major Japanese aerospace companies, Kenji Ikeda of MHI, Teruaki Yamada of KHI and Iwao Shibuya of FHI as well as Vice Chairmen Kenji Uchino and Eiichi Yamaguchi of the Civil Transport Development Corporation (CTDC) are scheduled to leave for Seattle, Washington, October 15 for talks with top officials of Boeing Commercial Airplane Co. on issues related to development of a new medium size passenger aircraft coded here as the Y-XX.

Chairman F. Swarttouw and F-29 Project Manager J. Cornelis of Fokker Aircraft Co. were in Seattle in the middle of September, contacting Boeing on a possibility of developing the F-29 with the American company as well as Japanese industry on an equal partner basis, according to local industry sources. Boeing has reportedly organized a special team to study Fokker's proposal and the team is expected to conclude its findings in the middle of October, they say.

Since Swarttouw and his team were in Tokyo last month and made a proposal on joint development of the F-29 with Japan and Boeing, the industry has to reply to the Dutch company in some manner. Considering the close relations with Boeing on development and production of the 767 aircraft (coded here as the Y-X), Japanese industry leaders want to hear Boeing's views on the Dutch proposal.

When T. A. Wilson, Chairman of the Boeing Co., was in Japan in March 1980, he told top officials of MITI that Boeing would be ready to talk with Japanese industry leaders if Japan wanted to develop a new medium-class aircraft on an international collaboration basis.

Japanese industry leaders, who visited Seattle in the middle of August and discussed the Y-XX joint development possibility, reportedly refrained from making any definite proposals acceptable to the American company.

In present circumstances, it is seen as difficult for the Japanese to predict what will result in the coming talks with Boeing officials in Seattle, industry sources say.

CSO: 4170

ECONOMIC

SHIN MEIWA IN DANGER OF LOSING FLYING BOAT BUSINESS

Tokyo JPE AVIATION REPORT-WEEKLY in English 15 Oct 80 pp 2-4

[Text]

Shin Meiwa Industry is in danger of losing its flying-boat manufacturing business as the Maritime Self-Defense Force (MSDF) has decided to stop procurement of Shin Meiwa PS-1 antisubmarine patrol flyingboats after no progress in the firm's scheme for developing commercial flyingboats.

The reason for the MSDF's suspension of PS-1 procurement is that the ¥5,000 million flyingboat is less cost efficient than the sophisticated P-3C antisubmarine patrol aircraft, priced at about ¥9,000 million, which the MSDF is going to introduce. Shin Meiwa will manufacture only US-1 rescue amphibians for the MSDF after suspension of PS-1 production.

Prior to the PS-1 production suspension, the company considered developing new commercial flyingboats two years ago. It has been seeking collaboration with West German and Canadian manufacturers in the scheme. The Society of Japanese Aerospace Companies (SJAC) has also prepared a recommendation on development of new commercial flyingboats, envisaging a 30-to-50-seat amphibious aircraft equipped with a turbofan engine. It has estimated development cost at ¥37,000 million with demand in Japan and Southeast Asia projected at more than 870 aircraft.

However, other Japanese aircraft manufacturers remain reluctant to agree with the recommendation. Executives of major aircraft manufacturers such as Mitsubishi Heavy Industries, Kawasaki Heavy Industries and Fuji Heavy Industries have doubts about profitability, saying the projected demand is too optimistic. Flyingboats are less fuel efficient than other aircraft because of greater weight and a turbofan engine will boost its price, they said. Users would be reluctant to purchase such an inefficient aircraft, they added.

Aircraft industry leaders also said it would be difficult to request additional government subsidies because the industry is now handling big government-subsidized projects, including the Japan-US-Italy Boeing 767 program, the Japan-Rolls-Royce RJ500 aero engine project, experimental STOL (short takeoff and landing) aircraft development, the experimental FJR jet engine program and the incoming Y-XX medium airliner project.

Although SJAC hopes to materialize the flying-boat development project, Shin Meiwa sees a gloomy future. Although the firm is Japan's fourth largest aircraft manufacturer, its business is limited to amphibious aircraft production. It fears that its technology would be lost unless a new project surfaces.

Meanwhile, the MSDF plans to procure 10 US-1 rescue flyingboats, of which orders for seven have been placed with Shin Meiwa. An order for the eighth US-1 will be awarded in March 1981 or at the end of FY 1980. The last three aircraft will be used as reserves. Although the ninth order had been planned for FY 1983, the MSDF is expected to push it ahead one year to FY 1982 to minimize problems which Shin Meiwa will face because of a production blank. The 10th order is expected for FY 1983.

The MSDF is still studying future operational requirements for the US-1, including a long-range rescue mission. In case long-range mission capability is required, the US-1 would have to be modified or a new aircraft would have to be developed. The MSDF is expected to complete its study by next summer. This study also covers procurement of PS-1 spare parts.

Although suspension of PS-1 procurement will reduce Shin Meiwa's aircraft production operation, the MSDF said it cannot give the company orders for other aircraft or parts.

CSO: 4120

ECONOMIC

PROGRESS REPORTS ON F-15, P-3C PRODUCTION PROGRAMS

Tokyo JPE AVIATION REPORT-WEEKLY in English 22 Oct 80 pp 3-4

[Text]

The Japanese aircraft industry has now started assembly of knockdown sections of F-15 fighters and P-3C antisubmarine patrol aircraft prior to license production.

The first knockdown F-15 has entered the final stage at Mitsubishi Heavy Industries' (MHI) Komaki Minami Works in Aichi Prefecture. This is the third F-15 to be delivered to the Air Self-Defense Force (ASDF), following two complete aircraft being imported from McDonnell Douglas Corp. Knockdown components for this aircraft, including front, middle and rear fuselage parts, main wings and tail assembly, arrived last spring. Sections for the second knockdown aircraft have also arrived. The first knockdown F-15 will commence flight tests in July 1981 with the fire control system and other systems being mounted from now. Delivery to ASDF is scheduled for the end of 1981.

MHI will assemble eight knockdown F-15s and then produce 78 aircraft under license over 10 years. The ASDF will procure 100 F-15s, including 14 aircraft that will be imported.

MHI's Komaki Minami Works is now also manufacturing the last or 140th F-4EJ Phantom fighter. The F-4EJ will gradually be replaced by the F-15 as ASDF's mainstay fighter.

As for the first knockdown P-3C, Kawasaki Heavy Industries' (KHI) Gifu Works in Gifu Prefecture is proceeding with assembly of middle fuselage sections at present. This will be followed by fuselage tests before key electronic devices are installed. KHI will receive equipment for the test from Lockheed Aircraft Corp., early next year. Installation of such electronic devices as data processing systems and infrared detection systems will begin next spring and the first knockdown P-3C will make its first

flight in late 1981. Delivery to the Maritime Self-Defense Force (MSDF) will start in May 1982.

While assembling four knockdown P-3Cs, KHI will manufacture parts for license production from next year. The MSDF will purchase 45 P-3Cs--four knockdown aircraft, three finished aircraft by import and 38 aircraft from license production.

CSO: 4120

ECONOMIC

FHI ASKS JDA FOR LICENSING PRODUCTION OF BELL AH-1S

Tokyo JPE AVIATION REPORT-WEEKLY in English 22 Oct 80 p 4

[Text]

Fuji Heavy Industries Ltd. (FHI) has officially asked JDA for approval to start domestic production of the Bell AH-1S antitank helicopter for the Ground Self-Defense Force in FY 1982.

FHI maintains that domestic production of the antitank helicopter under license from Bell will help promote advanced technology related to antitank warfare, and that production will lead to development of improved airframes and new airborne weapons systems. The unit price of the helicopter to be imported either through the FMS or commercial channels may appear cheaper than those produced under license at first, but domestic production will be better for the operator if future supplies and technical support are taken into consideration, it states.

It adds that domestic production will also more suitable to the annual budget system, in which a small quantity of aircraft is contracted every year.

In addition to these factors, the US Army is expected to end procurement of the AH-1S after 1981 and FY '82 appears to be the last chance for Japan to commence production of the helicopter under Bell license, FHI says. American vendors in the US Army AH-1S program also want an early Japanese decision so that they can draft future plans for maintenance of production lines and personnel, the company adds.

GSDF has purchased two AH-1S helicopters for evaluation purposes. The GSDF Aviation School which was entrusted with evaluation work completed all tests in June and a final report will be submitted to the JDA by the Ground Staff Office, GSDF, soon. GSDF plans to procure 56 AH-1S helicopters and to organize 3.5 antitank air units, pending final approval.

BRIEFS

NATIONAL ENERGY DEVELOPMENT AUTHORITY--Tokyo, Oct 1, KYODO--Japan Wednesday officially launched its full-scale exploitation of alternative energy sources with establishment of the National Energy Development Authority of Japan (NEDA). Its branch offices also opened in Washington and Sydney. In an inauguration ceremony at the Sunshine Building in Tokyo's Ikebukuro, Tsutomu Watamori, vice president of Hitachi Ltd., became director, leading 336 executives and staff members chosen from the government and about 30 steel, electric and other energy-related enterprises. The authority has a total fiscal 1980 budget of yen 17.6 billion (about \$83 million) for the development of coal liquefaction, solar powerplants, geothermal heat and exploitation of overseas coal mines. Through this program, Japan hopes to reduce dependency on oil, now accounting for 75 percent of the nation's total primary energy source, to less than 50 percent by 1990, officials said. [Text] [OW031155 Tokyo KYODO in English 0456 GMT 1 Oct 80 OW]

FOREIGN EXCHANGE RESERVES--Tokyo, Oct 1, KYODO--Japan's foreign exchange reserves increased dollar 720 million during September to reach dollar 23,768 million at the end of the month, the Finance Ministry said Wednesday. This represented the sixth straight monthly gain. This also meant that the nation's foreign exchange reserves increased by dollar 5,225 million during the past six months, the ministry said. The ministry attributed the September increase to the smooth influx of foreign funds through the operation of the reserves. The Bank of Japan also bought a large amount of U.S. dollars to cope with the appreciation of the yen against the U.S. currency, it added. Meanwhile, Japan had the world's sixth largest foreign exchange reserves of dollar 22,793 million at the end of July. West Germany continued to top the list with dollar 55,230 million, followed by France, Italy, Britain and the United States in that order. [Text] [OW031155 Tokyo KYODO in English 0850 GMT 1 Oct 80 OW]

TRADE CONTRACT WITH LIAONING--Tokyo, Oct 1, KYODO--An electronic plant in China's Liaoning Province will produce tape recorders for a Japanese company under the processing trade formula based on a recent Chinese decision to enhance the autonomy of local governments, it was learned here Wednesday. According to informed sources, Sanwa Denki Kohyo K.K., a small electric appliance maker based in Yamagata, northeastern Japan, recently signed a three-year processing trade contract with the Liaoning branch of the China National Light Industrial Products Import and Export Corporation, the Liaoning Electronic Industry Corporation and the No. 3 Liaoning Electronic Factory in Yingkou City. Under the contract, which took effect Wednesday, Sanwa will supply some yen 297 million worth of portable tape recorder parts to the No. 3 Liaoning Electronic Factory and import finished

and semifinished recorders for about yen 459 million for re-export to Taiwan and Hong Kong. The sources said the Chinese move apparently reflects the Beijing government's recent decision to leave decisions on small-scale joint business undertakings to the discretion of local governments. [Excerpt] [OW031155 Tokyo KYODO in English 1107 GMT 1 Oct 80 OW]

TAX REVENUES--Tokyo, Oct 7, KYODO--Tax revenue in August totaled yen 2,259.6 billion, up 17.4 percent over the year before, according to the Finance Ministry. This brought the April-August total to yen 7,467.6 billion, 28.3 percent of the estimated tax revenues for fiscal 1980. The ministry said collection of corporate tax made a good showing as Toyota Motor Co. paid some yen 120 billion tax in the month, but revenues from commodity, liquor and auto weight taxes and custom duties fell short of year-before levels. [Text] [OW070833 Tokyo KYODO in English 0225 GMT 7 Oct 80 OW]

EXPORT LETTERS IN SEPTEMBER--Tokyo, Oct 2, KYODO--Export letters of credit received in September totaled dollar 7,371 million, up 22.3 percent from the year before, the Finance Ministry and the Bank of Japan said Thursday. The ministry and the bank attributed the large gains chiefly to continued high-level exports to Europe. Another reason is that the number of business days in September was one day more than in the like month of last year. The rate of increase, adjusted for seasonal variations, was 18.2 percent. Exports of electric machinery were up 35 percent from the year-before level and automobiles, up 29 percent. Exports to the Mideast, Europe and Asia, in particular, recorded an appreciable increase. By region, exports to Europe soared 41 percent from the year before--the largest percentage gain. Exports to Asia and the Mideast also increased steeply. On the other hand, exports to the United States registered a small 8 percent increase. Exports of steel products to the U.S. were down 10 percent. Exports of general machinery were up only 2 percent. In contrast, auto exports to the U.S. were up 11 percent. [Text] [OW031215 Tokyo KYODO in English 0337 GMT 2 Oct 80 OW]

INCREASE IN JDA PROCUREMENT--The Japanese Defense Agency's (JDA) domestic procurement of defense equipment in FY 1981 will increase by more than 10 percent over the previous fiscal year, according to the JDA and defense industry sources. The JDA submitted to the Ministry of Finance a FY 1981 budget request totaling ¥2,446,500 million, which the sources said includes ¥785,100 million for purchase and maintenance of defense equipment. Even after the MOF's probable cuts, the equipment outlay will be at least ¥750,000 million, an increase of more than 10 percent over the current fiscal year. Of the equipment outlay, funds for equipment from the domestic defense industry total ¥650,000 million, which is a double-digit increase. [Text] [Tokyo JPE AVIATION REPORT-WEEKLY in English 22 Oct 80 pp 2-3]

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SCIENCE AND TECHNOLOGY

XF-3 TURBOFAN ENGINE DEVELOPMENT PROGRAM

Tokyo JPE AVIATION REPORT-WEEKLY in English 15 Oct 80 pp 8-9

[Text]

The Technical R&D Institute (TR&DI) reports smooth progress in its XF-3 turbofan engine development program. It is fabricating five engines in the current fiscal year for various tests after the XF-3-20, delivered to TR&DI in the spring of 1979 by Ishikawajima-Harima Heavy Industries (IHI), achieved thrust of 1,660 kilograms in December 1979. The XF-3 engine is designed for the MT-X medium jet trainer to be developed.

The project is based on jet engine research data of TR&DI's 3rd R&D Center and IHI since development of the existing J-3 engine.

The first XF-3 engine was fabricated in FY 1975. The XF-3-1 has been used for rapid acceleration and deceleration, inlet distortion, outdoor noise, low temperature and other tests. Following the XF-3-1, the XF-3-20, a modified version, was fabricated in FY 1977 and 1978. Running tests started in the spring of 1979 and the target thrust was achieved in December 1979. Total running hours of the two test engines exceed 500 hours.

Future tests for demonstrating reliability will have to cover various aspects, including ground performance, high-altitude characteristics, operational and environmental flexibility, fatigue and antipollution. Specifically planned are airborne tests to be conducted on a modified C-1 transport as a flying test bed.

Important requirements of the new jet engine include fuel efficiency and low production costs as well as high performance and reliability characteristics.

SCIENCE AND TECHNOLOGY

TR&DI'S MAJOR PROGRAMS FOR FY 1981 OUTLINED

Tokyo JPE AVIATION REPORT-WEEKLY in English 22 Oct 80 pp 6-8

[Text]

Outlined below are major research and development programs related to aircraft, missiles and avionics, which the JDA's Technical R&D Institute (TR&DI) will carry out in FY 1981:

* MT-X Medium Jet Trainer

The MT-X program will begin with basic design in FY 1981 at request of the ASDF. The new trainer is planned to cover training missions of both the T-33 and T-1. The JDA has requested about ¥2,398 million for basic design lasting until FY 1982. The total cost for the program is estimated at ¥40,000 million. An experimental aircraft will be fabricated by FY 1986 with detailed design starting in FY 1983 for flight tests in FY 1987. A small turbofan engine, being developed by TR&DI and Ishikawajima-Harima Heavy Industries (IHI), is almost certain to be adopted. The final decision will come at the end of FY 1982 before detailed design. The engine's thrust is planned at 1.66 tons.

* Small Turbofan Engine

The JDA has requested about ¥2,550 million for fabrication of five test engines from FY 1981 in addition to another five being fabricated from FY 1980 to 1982. This request is almost certain to be approved. The 10 test engines, based on two prototype units fabricated and tested by the TR&DI and IHI from FY 1975, will be used for pre-flight rating-testing (PFRT) from the latter half of FY 1981 to the middle of FY 1983. Based on PFRT data, the TR&DI will consider the possibility of the engine being mounted on the

MT-X. PFRT will consist of running tests (27 months), distortion tests (14 months), over-rotation and excessive temperature tests (16 months), FTB (flying test bed) tests (16 months), ATF (altitude test facility) tests (12 months), ice ingestion FOD (foreign object damage) tests (12 months), sand and bird ingestion FOD tests (12 months) and 60-hour calibration tests (six months).

* ALQ-5 ECM System

The ALQ-5 ECM (electronic countermeasure) system for ASDF is designed to be installed on the C-1 transport for ECM training against ground site and surface-to-air missile (SAM) radars. Main parts are being fabricated from FY 1979 to 1981.

* New Radio Equipment

Development of new field radio equipment will start in FY 1981 at the request of GSDF. The new radios will be used for command and communications in place of existing sets. They will feature excellent ECM performance, digital data communications, facsimile transmissions, and other functions. Under the development program lasting until FY 1982, TR&DI will fabricate eight units for vehicles, six portable units, two units for aircraft and two units for repeater facilities.

* Air Combat Missile

The TR&DI has been studying a new air-to-air missile (AAM) for the ASDF at its Third R&D Center since FY 1978. The airframe, rocket motor and servo combustion devices will be fabricated in FY 1981. The new infrared ray homing AAM, to be used with fighters, will be designed to outperform the Sidewinder AIM-9L for the F-15 fighter.

* Control-Configured Vehicle (CCV)

An ASDF T-2 trainer will be converted into an experimental aircraft with direct lift and other new controls to collect data for developing CCV technology. Fabrication of a fly-by-wire computer system and modification of a T-2 will follow manufacture of the electric control system, air combat flaps and canards from FY 1979 to 1981. In the modification, flaps, horizontal canards and vertical canards will be installed on the T-2. Flight tests will be held from the first half of FY 1983 to 1985.

* Portable Surface-to-Air Missile (SAM)

The portable SAM program has been funded since FY 1979. An experimental airframe and guidance systems will be fabricated for development of the image homing portable SAM, which the three SDF services will use as defense against intruding aircraft. The new portable SAM is designed to replace the Stinger which ASDf and GSDF have requested for FY 1981 under the FY 1980-84 Medium-Term Defense Program. The Stinger depending on visible radiation for image homing guidance has no all-weather capability, but, the new portable SAM will have an infrared sensor to cover missions in bad weather.

* Precision Guided Simulator

The TR&DI will complete a new precision guided simulator in FY 1981 with a central control system, computer and other newly fabricated components. The simulator, which will become operational in FY 1982, will be used for research and evaluation of future advanced missile systems at the Third R&D Center.

* Electronic Warfare Simulator

The TR&DI will start fabrication of electronic warfare simulators in FY 1981 on the basis of research carried out in FY 1979 and 1980. These simulators will be used for evaluation of various future electronic warfare systems and development of ESM, ECM and ECCM technology necessary for increasing electronic warfare capability. ECM and ECCM subsimulators will be built in FY 1981. They will be completed in FY 1983 for operation at a radiowave absorbing room to be built at the First R&D Center. Funds needed for construction of the room have been requested for FY 1981 together with those necessary for simulator fabrication.

* Future Fire Control Systems (FCS)

An antenna for a fire control system will be fabricated from FY 1981 to establish the active phased array technology. This will precede development of new aircraft FCSs which can cope with low-level supersonic aircraft attack and simultaneous intrusion of many aircraft.

These systems must be suitable for CCV aircraft. A basic FCS development program will be prepared from FY 1983 after evaluation of the antenna in FY 1981 and 1982.

SCIENCE AND TECHNOLOGY

TR&DI TO DEVELOP SCOUT-RECONNAISSANCE APC FROM FY '82

Tokyo JPE AVIATION REPORT-WEEKLY in English 22 Oct 80 p 9

[Text]

The JDA's TR&DI will delay technical development of a scout/reconnaissance vehicle for the GSDF until FY 1982, although it had originally been planned for FY 1981.

The TR&DI has already completed a wheeled armored personnel carrier (APC) with sensors and a 20mm machine gun system as an experimental scout/reconnaissance vehicle. However, cautious opinion has prevailed that further consideration of evaluation results for the fabricated vehicle is necessary before technical development because higher requirements may be necessary.

From FY 1980 to 1981, suitable requirements will be prepared with especially the vehicle's weapons in mind, according to informed sources.

The TR&DI has also fabricated a command/communications vehicle for GSDF. This APC will be adopted after technical and operational tests in FY 1980 and 1981 with procurement planned to start in FY 1982.

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